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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/047,130	01/15/2002	Dave Van Dyne	97-460	4244
7:	590 07/29/2004		EXAMINER	
Bruce Day			YAO, SAMCHUAN CUA	
Martin Pringle			ART UNIT	PAPER NUMBER
6900 College B Suite 710	siva		1733	
Overland Park, KS 66211			DATE MAILED: 07/29/2004	

Please find below and/or attached an Office communication concerning this application or proceeding.

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	Application No.	Applicant(s)	
	10/047,130	DYNE, DAVE VAN	
Office Action Summary	Examiner	Art Unit	
	Sam Chuan C. Yao	1733	
The MAILING DATE of this communication app Period for Reply	pears on the cover sheet with the d	correspondence address -	•
A SHORTENED STATUTORY PERIOD FOR REPL'THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply if NO period for reply is specified above, the maximum statutory period Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may a reply be tir y within the statutory minimum of thirty (30) day will apply and will expire SIX (6) MONTHS from , cause the application to become ABANDONE	mely filed /s will be considered timely. In the mailing date of this communica ID (35 U.S.C. § 133).	ation.
Status			
1)⊠ Responsive to communication(s) filed on 18 Ju	une 2004.	i	
<u> </u>	action is non-final.		
3) Since this application is in condition for allowar	nce except for formal matters, pro	secution as to the merits	s is
closed in accordance with the practice under E	Ex parte Quayle, 1935 C.D. 11, 4	53 O.G. 213.	
Disposition of Claims		:	
4)⊠ Claim(s) <u>1-6,9 and 10</u> is/are pending in the app	olication.		
4a) Of the above claim(s) <u>1-6 and 9</u> is/are without			
5) Claim(s) is/are allowed.			
6)⊠ Claim(s) <u>10</u> is/are rejected.		*	
7) Claim(s) is/are objected to.		·	
8) Claim(s) are subject to restriction and/or	r election requirement.		
Application Papers			
9) The specification is objected to by the Examine	r.		
10)☐ The drawing(s) filed on is/are: a)☐ acce	epted or b) objected to by the E	Examiner.	
Applicant may not request that any objection to the			
Replacement drawing sheet(s) including the correcti	ion is required if the drawing(s) is obj	ected to, See 37 CFR 1,121	1(d).
11)☐ The oath or declaration is objected to by the Ex	aminer. Note the attached Office	Action or form PTO-152.	
Priority under 35 U.S.C. § 119			
12) Acknowledgment is made of a claim for foreign	priority under 35 LLS C & 110(a)	L(d) or (f)	
a) ☐ All b) ☐ Some * c) ☐ None of:	priority under 50 5.5.5. § 115(a)	-(d) Of (f).	
1.☐ Certified copies of the priority documents	s have been received.	÷	
2. Certified copies of the priority documents		on No.	
3. Copies of the certified copies of the prior			
application from the International Bureau	ı (PCT Rule 17.2(a)).		
* See the attached detailed Office action for a list of	of the certified copies not receive	d.	
		:	
Attro-hm-put(a)			
Attachment(s)  Notice of References Cited (PTO-892)	4) 🔲 Interview Summary	(PTO 413)	
P) Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Da	nte	
B) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date	5) Notice of Informal P 6) Other:	atent Application (PTO-152)	
	5) 🗀 Sulet		

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#### **DETAILED ACTION**

#### Election/Restrictions

1. Applicant's election with traverse of Group II in the reply filed on 06-18-04 is acknowledged. The traversal is on the ground(s) that "These claims are drafted so that they could not reasonably be in separate art areas, nor could they relate to other and materially different processes". This is not found persuasive because, apparatus claims 1-6 are still pending. More importantly, as noted in a prior office action, the apparatus as claimed can be used to practice another and materially different process such as providing a hot-melt coated insulating batt, and heat-pressing the batt with a metallic foil or a paper sheet using the recited belt-press. In fact, the apparatus as claimed can also be practiced without using any covering layer (i.e. no covering layer is provided to a cover layer feeder apparatus) and just using the recited belt press to cure a prepreg or to form a fiberboard from a resin-impregnated fiber mat.

The requirement is still deemed proper and is therefore made FINAL.

#### Claim Rejections - 35 USC § 112

- The following is a quotation of the second paragraph of 35 U.S.C. 112:
   The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 3. Claim 10 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

This claim is indefinite, because it is unclear whether this claim is directed to an apparatus claim or a method claim (see the recited preamble of this claim). In view that,

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the body of this claim requires performing process steps, this claim is assumed to be directed to a method claim.

## Claim Rejections - 35 USC § 103

- 4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 5. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yokokita et al (US 6,068,715) in view of (Kobayashi et al (US 5,091,133), Froese et al (US 6,007,320) and Ashton (US 5,057,175)).

Yokokita et al discloses a continuous process of making a stampable fibrous sheet, the process comprises providing a pair of continuous thermoplastic films (F',F"), providing a continuous glass fiber mat (M) between the thermoplastic films, feeding all layers to a pair of heated pressing belts, heat-pressing the layers to fuse the films to the fiber mat and form the stampable fibrous sheet (col. 6 lines 9-32; figure 1).

Yokokita et al is silent on how the layers are heated in a pair of heated pressing belts. However, it would have been obvious in the art to use a platen which is heated by electrical resistance heaters, because it is a notoriously common practice in diverse fields of art to use a pair of pressing belts, which have a platen that is heated by an electric resistance heater as exemplified in the teachings of Kobayashi et al (col. 5 lines 23-28; figures 1-2), Froese et al (col. 5 lines 45-50),

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and Ashton (col. 6 lines 62-68; figures 2A & 3A). There is none, but only the expected result (of heating outer films and a glass fiber mat to fuse them together) would have been achieved.

6. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Patel et al (US 6,191,057 B1) in view of Yokokita et al (US 6,068,715), and further in view of (Kobayashi et al (US 5,091,133), Froese et al (US 6,007,320) and Ashton (US 5,057,175)).

Patel et al discloses a continuous process of making an insulating article, the process comprises providing a continuous glass-fiber insulating batt; providing a pair of continuous co-extruded polymeric films, each film having a barrier layer and a fusible layer; disposing the pair of co-extruded films onto the opposing surfaces of the insulating core layer; heat-pressing layers together to melt the fusible layer of each film to fuse each film onto the opposing surfaces of the core layer (col. 8 line 61 to col. 9 line 50; figure 7). Patel et al does not teach using a pair of heated pressing belts to bond and fuse the polymeric films onto the opposing surfaces. However, such would have been obvious in the art, because it is conventional in the art to use a pair of heated pressing belts for heat-fusing opposing outer films (F'F") onto a glass-fiber mat as exemplified in the teachings of Yokokita et al (figure 1). Note: the discussion of the Yokokita et al patent is set forth in numbered paragraph 3.

Patel et al taken with Yokolita et al does not teach using platens heated with electrical resistance heaters. However, such would have been obvious in the art

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it is a notoriously common practice in diverse fields of art to use a pair of pressing belts which have a platen that is heated by an electric resistance heater as exemplified in the teachings of Kobayashi et al (col. 5 lines 23-28; figures 1-2), Froese et al (col. 5 lines 45-50), and Ashton (col. 6 lines 62-68; figures 2A & 3A). There is none, but only the expected result (of heating outer films and a glass fiber mat to fuse them together) would have been achieved.

### Response to Arguments

7. Applicant's arguments with respect to claim 10 has been considered but are moot in view of the new ground(s) of rejection.

A few remark regarding Counsel's characterization of the Yokokita '715 patent. It is true that, Yokokita '715 teaches providing a thermoplastic film (F) between a pair of fiberglass mats. However, as clearly illustrated in figure 1, Counsel is completely ignoring a pair of outer thermoplastic films (F',F"). As for a limitation of "conveying a continuous insulating batt", it is respectfully submitted that, this reads on a continuous glass fiber mat (M) taught by Yokokita et al '715, because the glass fiber mat is clearly capable of acting as an insulating material.

Moreover, a resultant stampable fibrous sheet (i.e. prior to being stamped to a desired shape) is also taken to be capable of being using as a building insulating material.

#### Conclusion

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

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§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sam Chuan C. Yao whose telephone number is (571) 272-1224. The examiner can normally be reached on Monday-Friday with second Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Blaine Copenheaver can be reached on (571) 272-1156. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Sam Chuan C. Yao Primary Examiner Art Unit 1733

Scy 07-26-04